1. A method for monitoring, measuring and capturing transactions in a communication network experienced by a user of a communication device operating in the communication network, said method comprising:

monitoring a plurality of transactions occurring between a user of a communication device operating in a communication network and the communication network in accordance with a functional definition of a probe element of the communication device, wherein the plurality of transactions are at least a portion of the user's interaction with the communication network via the communication device and wherein the functional definition of the probe element is operable to be dynamically and remotely configured by the communication network via a communication link between the communication device and the communication network;

capturing the plurality of transactions in accordance with the functional definition of the probe element; and

measuring one or more characteristics of the plurality of transactions to generate user interaction data in accordance with the functional definition of the probe element.

2. The method of claim 1, further comprising prior to said monitoring:

defining the functional definition of the probe element in accordance with the type of user interaction data desired to be generated for the communication device.

3. The method of claim 2, further comprising:

downloading the probe element to the communication device from the communication network via the communication link.

4. The method of claim 1, further comprising:

4. The method of claim 1, further comprising:

transmitting the user interaction data to the communication network in response to at least one of the functional definition of the probe element and a request from the communication network.

5. The method of claim 1, further comprising prior to said monitoring:

downloading the probe element from the communication network via the communication link.

6. The method of claim 1, wherein the communication device operates in a non-interactive mode of operation in which the user interaction data is generated in a manner that is transparent to the user of the communication device.

7. The method of claim 1, further comprising:

a network operator of the communication network dynamically controlling operation of the communication device in a diagnostic mode of operation in accordance with a diagnostic criterion.

8. The method of claim 7, further comprising:

the network operator controlling the communication device to perform diagnostic tests of one or more network performance problems capable of being monitored by the communication device in accordance with the diagnostic criterion.

9. The method of claim 7, further comprising:

when not in the diagnostic mode of operation the communication device operating in a non-interactive mode of operation during which the plurality of transactions are monitored and captured and the user interaction

data is generated in a manner that is transparent to the user of the communication device.

10. The method of claim 7, further comprising:

when not in the diagnostic mode of operation the communication device operating in a quasi-interactive mode of operation during which the plurality of transactions are monitored and captured and the one or more characteristics of the plurality of transactions are monitored by the probe element to generate the user interaction data and during which the user can decide when to report to the network operator one or more network performance problems identified in the user interaction data.

11. The method of claim 7, further comprising:

the user of the communication device granting permission to the network operator to control the communication device to perform diagnostic tests while in the diagnostic mode of operation.

12. The method of claim 7, further comprising:

downloading the diagnostic criterion from the communication network to the probe element via the communication link.

13. The method of claim 12, wherein the communication link comprises the Internet.

14. The method of claim 1, further comprising:

the communication device operating in a quasi-interactive mode of operation during which the plurality of transactions are monitored and captured and the one or more characteristics of the plurality of transactions are measured by the probe element to generate the user interaction data and

during which the user can decide when to report to the network operator one or more network performance problems identified in the user interaction data.

15. The method of claim 14, further comprising:

the user of the communication device previously deciding that the communication device will operate in the quasi-interactive mode of operation.

16. The method of claim 1, wherein the user interaction data comprises network engineering data.

17. The method of claim 1, wherein the user interaction data comprises user profile data.

18. The method of claim 1, wherein the user interaction data comprises one or more of network engineering data and user profile data.

19. The method of claim 1, further comprising:

programming the probe element with the functional definition.

20. The method of claim 19, wherein the programming of the probe element is provided by the communication network.

21. The method of claim 20, wherein the programming is provided by the communication network via the communication link and is capable of being dynamically changed by the communication network.

22. The method of claim 21, wherein the programming of the probe element is dynamically changed by the communication network via the communication link in response to the user interaction data.

23. The method of claim 1, wherein the plurality of transactions comprise one or more of voice communications and data communications between the user of the communication device and the communication network.

24. The method of claim 1, further comprising:

performing one or more diagnostic tests of the communication network in a diagnostic mode of operation in accordance with a diagnostic criterion downloaded to the communication device from the communication network via the communication link in response to the communication network identifying one or more network performance problems from the user interaction data.

25. The method of claim 1, further comprising:

transmitting the generated user interaction data from the communication device to a collection communication device of the communication network.

26. The method of claim 1, further comprising:

receiving multiple user interaction data from one or more additional communication devices in the communication network;

aggregating the multiple user interaction data to generate aggregate user interaction data; and

transmitting the aggregate user interaction data to the communication network via the communication link.

27. The method of claim 1, further comprising:

transmitting the user interaction data to the communication network in response to at least one of the functional definition of the probe element and a request from the communication network; and

analyzing the user interaction data to identify one or more network performance problems of the communication network.

28. The method of claim 27, further comprising:

implementing changes to operation of the communication network to counter the one or more identified network performance problems and improve communications in the communication network from the perspective of the user of the communication device.

29. The method of claim 27, further comprising:

generating one or more network performance problem reports comprising the one or more network performance problems identified.

30. The method of claim 27, further comprising:

the communication device performing one or more diagnostic tests of the communication network in a diagnostic mode of operation in accordance with a diagnostic criterion downloaded to the communication device from the communication network via the communication link in response to the one or more network performance problems identified during analysis of the user interaction data.

31. The method of claim 27, wherein transmitting the user interaction data to the communication network comprises:

transmitting the user interaction data to a collection communication device of the plurality of communication devices which transits the user

interaction data to a server of a network operator of the communication network.

32. The method of claim 27, wherein transmitting the user interaction data to the communication network comprises:

receiving multiple user interaction data from other communication devices of the plurality of communication devices in the communication network;

aggregating the multiple user interaction data with the user interaction data generated by the communication devices to generate aggregate user interaction data; and

transmitting the aggregate user interaction data to the communication network via the communication link.

33. A method for improving communications of a communication network having a plurality of communication devices by which a plurality of corresponding user communicate in the communications network, said method comprising:

for each communication device of the plurality of communication devices:

monitoring a plurality of transactions occurring between a user of a communication device operating in a communication network and the communication network in accordance with a functional definition of a probe element of the communication device, wherein the plurality of transactions are at least a portion of the user's interaction with the communication network via the communication device and wherein the functional definition of the probe element is operable to be dynamically and remotely configured by the communication network via a communication link between the communication device and the communication network;

capturing the plurality of transactions in accordance with the functional definition of the probe element;

measuring one or more characteristics of the plurality of transactions to generate user interaction data in accordance with the functional definition of the probe element;

transmitting the user interaction data to the communication network in response to at least one of the functional definition of the probe element and a request from the communication network;

the communication network aggregating the user interaction data received from one or more communication devices of the plurality of communication devices to generate statistical information about the

communication network; and

the communication network analyzing the statistic information to identify one or more network performance problems of the communication network.

34. The method of claim 33, further comprising prior to said monitoring:

downloading the probe element to the communication device from the communication network via the communication link.

35. The method of claim 33, further comprising after said analyzing:

implementing changes to operation of the communication network to counter the one or more identified network performance problems and improve communications in the communication network from the perspective of one or more of the user of the one or more communication devices.

36. The method of claim 33, further comprising after said analyzing:

generating one or more network performance problem reports comprising the one or more network performance problems identified.

37. The method of claim 33, further comprising prior to said monitoring:

defining the functional definition of the probe element in accordance with the type of user interaction data desired to be generated for the communication device.

38. The method of claim 37, further comprising:

downloading the probe element to the communication device from the communication network via the communication link.

39. The method of claim 33, wherein the communication device operates in

a non-interactive mode of operation in which the user interaction data is generated in a manner that is transparent to the user of the communication device.

40. The method of claim 33, further comprising:

a network operator of the communication network dynamically controlling operation of the one or more communication devices in a diagnostic mode of operation in accordance with a diagnostic criterion.

41. The method of claim 40, further comprising:

the network operator controlling the one or more communication devices to perform diagnostic tests of the one or more network performance problems capable of being monitored by the one or more communication devices in accordance with the diagnostic criterion.

42. The method of claim 40, further comprising:

when not in the diagnostic mode of operation the one or more communication devices operating in a non-interactive mode of operation during which the plurality of transactions are monitored and captured and the user interaction data is generated in a manner that is transparent to the users of the one or more communication devices.

43. The method of claim 40, further comprising:

when not in the diagnostic mode of operation the one or more communication devices operating in a quasi-interactive mode of operation during which the plurality of transactions are monitored and captured and the one or more characteristics of the plurality of transactions are monitored by the probe element to generate the user interaction data and during which users of the one or more communication devices can decide when to report to

the network operator one or more network performance problems identified in the user interaction data.

44. The method of claim 40, further comprising:

the users of the one or more communication devices granting permission to the network operator to control the communication device to perform diagnostic tests while in the diagnostic mode of operation.

45. The method of claim 40, further comprising:

downloading the diagnostic criterion from the communication network to the probe element via the communication link.

46. The method of claim 45, wherein the communication link comprises the Internet.

47. The method of claim 33, further comprising:

the one or more communication devices operating in a quasi-interactive mode of operation during which the plurality of transactions are monitored and captured and the one or more characteristics of the plurality of transactions are measured by the probe element to generate the user interaction data and during which users of the one or more communication devices can decide when to report to the network operator one or more network performance problems identified in the user interaction data.

48. The method of claim 47, further comprising:

the users of the one or more communication devices previously deciding that the one or more communication devices will operation in the quasi-interactive mode of operation.

49. The method of claim 33, wherein the user interaction data comprises network engineering data.

50. The method of claim 33, wherein the user interaction data comprises user profile data.

51. The method of claim 33, wherein the user interaction data comprises one or more of network engineering data and user profile data.

52. The method of claim 33, further comprising:

programming the probe element with the functional definition.

53. The method of claim 52, wherein the programming of the probe element is provided by the communication network.

54. The method of claim 53, wherein the programming is provided by the communication network via the communication link and is capable of being dynamically changed by the communication network.

55. The method of claim 54, further comprising:

the communication network dynamically removing the probe element via the communication link.

56. The method of claim 54, wherein the programming of the probe element is dynamically changed by the communication network via the communication link in response to the user interaction data.

57. The method of claim 33, wherein the plurality of transactions comprise one or more of voice communications and data communications between the

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user of the communication device and the communication network.

58. The method of claim 33, wherein each communication device transmits the user interaction data to a server of the communication network.

59. The method of claim 33, wherein analyzing the user interaction data is performed by a network operator of the communication network.

60. The method of claim 33, wherein aggregating the user interaction data received from the one or more communication devices comprises mapping the user interaction data to corresponding geographic locations occurring within the communication network to generate the geo-centric statistical information associated with the geographic locations.

61. The method of claim 33, further comprising:

the one or more communication devices performing one or more diagnostic tests of the communication network in a diagnostic mode of operation in accordance with a diagnostic criterion downloaded to the one or more communication devices from the communication network via the communication link in response to the one or more network performance problems identified during analysis of the user interaction data.

62. The method of claim 33, wherein transmitting the user interaction data to the communication network comprises:

transmitting the user interaction data to a collection communication device of the plurality of communication devices that transmits the user interaction data to a server of a network operator of the communication network.

63. The method of claim 33, wherein transmitting the user interaction data to the communication network comprises:

receiving multiple user interaction data from other communication devices of the plurality of communication devices in the communication network;

aggregating the multiple user interaction data with the user interaction data generated by the communication devices to generate aggregate user interaction data; and

transmitting the aggregate user interaction data to the communication network via the communication link.

64. The method of claim 33, further comprising:

a network operator of the communication network broadcasting a group functional definition to a group of communication devices of the plurality of communication devices, wherein said group functional definition overrides the functional definition of each communication device of the group.

65. The method of claim 64, wherein a collector communication device of the group receives the group functional definition and distributes the group functional definition to other communication devices of the group.

66. The method of claim 64, wherein the group functional definition comprises a group diagnostic criterion that causes the group of communication devices to operate in a diagnostic mode of operation in accordance with the group diagnostic criterion.